

2017 Annual Drinking Water Quality Report
Town of Central
April 19, 2018

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is the U.S. Army Corps of Engineers Hartwell Lake Reservoir and Twelve-Mile Creek. The water from Lake Hartwell Reservoir is purchased from The City of Clemson and the water from Twelve-Mile Creek is purchased from Easley/Central Water District.

We're pleased to report that our drinking water is safe and meets federal and state requirements.

This report shows our water quality and what it means to you, the consumer.

If you have any questions about this report or concerning your water utility, please contact Dean Martin at 864-639-6381. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Council meetings. They are held on the second Monday of each month at Town Hall. The time of the meeting is posted at Town Hall and on the Town's website, www.cityofcentral.org. Our source water assessment plan is available for your review at www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/mindex.htm.

The Town of Central routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1 to December 31, 2017. **All results are from 2017 unless otherwise noted.** As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l): One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter: One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level: The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal: The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

The following is a partial list of a total of 76 contaminants that are monitored in your drinking water. This table shows only contaminants that were detected and what amount was detected. It also shows the maximum amount allowed by law (MCL) and a maximum goal amount (MCLG). The table also shows if a violation occurred.

LEAD AND COPPER TEST RESULTS (2016)

Contaminant	Violation Y/N	90 th percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Copper	N	0.10	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	3.4	ppb	15	0	Corrosion of household plumbing systems, erosion of natural deposits

Volatile Organic Contaminants

Haloacetic acids (HAAs)	N	46.0 Avg. Range 29.0 – 71.6	ppb	60	n/a	By-product of drinking water disinfectant
TTHM [Total trihalomethanes]	N	64.5 Avg. Range 37.6 – 91.7	ppb	80	n/a	By-product of drinking water chlorination

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
-------------	---------------	----------------	------------------	------	-----	--------------------------------

Inorganic Contaminants, Easley-Central Water District

Fluoride	N	0.51	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	0.34	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Inorganic Contaminants, City of Clemson

Fluoride	N	.43 ARJWS	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	.13 ARJWS	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Water Quality Table Footnotes

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Microbiological Contaminants

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Fecal Coliform and E. coli: Fecal Coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Microbes in these wastes can cause short term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems. No Fecal Coliform or E. coli were found in any samples during this period.

Copper: The data is from The Town of Central's most recent test period, July 2016 – December 2016 and shows the 90th percentile results. No samples had a level greater than the action level of 1.3 mg/l.

Lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Central is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Fluoride: Fluoride level is controlled at approximately 0.50 ppm.

Polychlorinated Biphenyls (PCBs): PCBs have been a concern in the Central area for a number of years. PCBs have been found in Lake Hartwell and the Twelve-Mile River. They were introduced into the lake by an industrial operation that used this organic compound as insulation material in electrical transformers. PCBs are extremely persistent in the environment because they do not break down into new and less harmful chemicals. Exposure to PCBs can cause liver damage. Fortunately, PCBs settle to the bottom of the lake, and our drinking water is drawn from near the surface. PCBs were tested for and not detected in the drinking water.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS, or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office at 864-639-6381 if you have questions.

The Town of Central Utilities Department works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.